

**ABSTRACT**

**Method to divide upstream timeslots in a time division multiple access system, related line terminator and related network terminator**

5           A method to divide upstream timeslots in a multiple access system that couples a line terminator (LT) via a tree-like network to a plurality of network terminators (NT1, NT2, ..., NT16) and that distributes downstream data packets by the line terminator to the plurality of network terminators. The method includes the following steps :

- 10           - inclusion by the line terminator in a downstream data packet at a predefined place of a grant (TEA1 ; TEA2 ; ... ; TEA16) being associated to one of the plurality of network terminators and distributing that downstream packet,
- reacting by the network terminator upon reception and recognition of its own grant by transmitting an upstream data packet in a predefined
- 15           upstream timeslot.

              In the event when the network terminator is a lower order network terminator and the predefined place is a predefined first place, the upstream data packet are transmitted in a lower order timeslot.

              In the event when the network terminator is a higher order network

20           terminator and the predefined place is a predefined first place, the upstream data packet is transmitted in one of a plurality of higher order timeslots, where the higher order timeslots are subslots of a predefined number of higher order subslots included in the predefined upstream timeslot.

              In the event when the network terminator is a higher order network

25           terminator and the predefined place is a predefined second place, the upstream data packet is also transmitted in such higher order timeslot.